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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,366	10/03/2005	Faramarz Jadidi	GRP-0140	8303
23413	7590	10/12/2007		
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EXAMINER SZMAL, BRIAN SCOTT	
			ART UNIT 3736	PAPER NUMBER
			MAIL DATE 10/12/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/552,366

Applicant(s)

JADIDI, FARAMARZ

Examiner

Brian Szmal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 52-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/29/07; 10/19/06; 10/3/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***Specification***

1. The abstract of the disclosure is objected to because of the use of claim language, such as "said", throughout the abstract. Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: The disclosure includes references to cancelled claims.

Appropriate correction is required.

***Claim Objections***

3. Claims 52-55 and 68 are objected to because of the following informalities: The claims all utilize different variants of the word "setup". The different variants should be changed to a single variant of the word. Appropriate correction is required.
4. Claim 52 is objected to because of the following informalities: In line 1, "said" should be removed. In lines 10 and 12 "as a" should be removed. In line 12, "a said" should read as "said". In line 19, "the provided signals" lack antecedent basis in the claim. The claim utilizes "the device", which lacks antecedent basis in the claim. Appropriate correction is required.
5. Claim 53 is objected to because of the following informalities: There is lack of antecedent basis for "the device". In line 3, the parenthesis should be removed. Appropriate correction is required.

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6. Claim 54 is objected to because of the following informalities: There is lack of antecedent basis for "the device". In line 2, "as" should be removed. Appropriate correction is required.

7. Claim 55 is objected to because of the following informalities: There is lack of antecedent basis for "the device". Appropriate correction is required.

8. Claim 61 is objected to because of the following informalities: There is lack of antecedent basis for "the device". In line 3, "electrode(s)" should read as "one or more electrodes". In line 4, "value(s)" should read as "values". Appropriate correction is required.

9. Claim 68 is objected to because of the following informalities: In line 1, "said" should be removed". In lines 8 and 10, "as a" should be removed. In line 10, "a said" should read as "said". There is lack of antecedent basis for "the device" in the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 52-68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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12. Regarding claims 52, 54, 65 and 68, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

13. Regarding claim 55, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 52-55, 58, 59, 62, 66-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Lo et al (5,738,104).

Lo et al disclose an EKG based heart rate monitor and further disclose a means for providing signals indicative of muscle activity; a means for processing the signals in order to detect a particular activity; a means for providing a feedback signal; the device is operable in a setup mode and a use mode; in the setup mode the device is user controllable to receive first reference input signals from the providing means which are indicative of other muscle activity and to receive second reference input signals indicative of the particular muscle activity; the device is configured in the setup mode to process the first reference input signals and the second reference input signals to

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identify therefrom at least one distinguishing criterion which differentiates the first reference input signals from the second reference input signals; in the use mode the device is configured to provide the feedback signal in response to detecting in the signals the at least one distinguishing criterion identified in the setup mode; the device is configured in the setup mode to process the first reference signals and the second reference signals to identify therefrom as the distinguishing criterion at least one frequency in the signals, the amplitude of the signals at which the frequency differentiates the first reference signals from the second reference signals, and wherein in the use mode, the device is configured to provide feedback in response to detecting at least a predetermined amplitude at the at least one frequency in the setup mode; in the setup mode the device is user controllable to receive the second reference input signals from the providing means which are indicative of an essentially maximal muscle activity; the processing means comprises a means for pattern recognition; the providing means comprises one or more electrodes for sensing EMG signals; the providing means comprises other sensor means; the apparatus comprises a slave module and a master module, the slave module being designed to be worn on the person; and a display means for displaying results. See Column 7, lines 25-42; Column 8, lines 63-65; Column 16, lines 33-48; Column 17, lines 10-11; and Column 19, lines 13-66.

16. Claims 52-59, 62, 63, 65, 67 and 68 are rejected under 35 U.S.C. 102(b) as being anticipated by Ober (4,669,477).

Ober discloses a means for preventing bruxism and further discloses a means for providing signals indicative of muscle activity; a means for processing the signals in

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order to detect a particular activity; a means for providing a feedback signal; the device is operable in a setup mode and a use mode; in the setup mode the device is user controllable to receive first reference input signals from the providing means which are indicative of other muscle activity and to receive second reference input signals indicative of the particular muscle activity; the device is configured in the setup mode to process the first reference input signals and the second reference input signals to identify therefrom at least one distinguishing criterion which differentiates the first reference input signals from the second reference input signals; in the use mode the device is configured to provide the feedback signal in response to detecting in the signals the at least one distinguishing criterion identified in the setup mode; the device is configured in the setup mode to process the first reference signals and the second reference signals to identify therefrom as the distinguishing criterion at least one frequency in the signals, the amplitude of the signals at which the frequency differentiates the first reference signals from the second reference signals, and wherein in the use mode, the device is configured to provide feedback in response to detecting at least a predetermined amplitude at the at least one frequency in the setup mode; in the setup mode the device is user controllable to receive the second reference input signals from the providing means which are indicative of an essentially maximal muscle activity; means for registering and storing the signals indicative of muscle activity during a time interval; the device is adaptable by having a means for adjusting the intensity of the feedback; the processing means comprises a means for pattern recognition; the providing means comprises one or more electrodes for sensing EMG signals; the

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providing means comprises other sensor means; the apparatus comprises means for storing data; a user module for wearing on the head; and a display means for displaying results. See Column 2, lines 30-68; Column 3, lines 1-29 and 60-68; and Column 4, lines 1-4.

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ober (4,669,477) as applied to claim 52 above, and further in view of Junker et al (6,636,763 B1).

Ober, as discussed above, discloses a means for preventing bruxism but fail to disclose the use of a means of obtaining EEG signals.

Junker et al disclose a brain-body actuated system and further disclose the use of acquiring EEG signals. See Column 3, lines 25-33.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means of Ober to include the use of EEG, since it is well known in the art that EEG signals can be used to indicate muscle movement.



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19. Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ober (4,669,477) and Junker et al (6,636,763 B1) as applied to claim 60 above, and further in view of Stice (4,993,423).

Ober and Junker et al, as discussed above, disclose a means of obtaining muscle activity signals but fail to disclose a means for testing the electrodes to determine if the electrodes are connected to the skin properly.

Stice discloses a means for differential lead impedance comparison and further discloses a means for testing the electrodes to determine if the electrodes are connected to the skin properly. See Column 2, lines 64-66.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Ober and Junker et al to include the ability of determining if the electrodes are contacting the skin, as per the teachings of Stice, since it is well known in the art to utilize a means of determining the contact of the electrodes since it provides a means of accurately acquiring bioelectrical signals from the patient.

20. Claims 64 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ober (4,669,477) as applied to claim 52 above, and further in view of Sunouchi et al (5,368,043).

Ober, as discussed above, disclose a means for preventing bruxism, but fail to disclose a computer and a means for transferring data thereto; and the apparatus comprises a slave module and a master module, the slave module being designed for wearing by a patient.

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Sunouchi et al disclose a means for measuring muscle activity and further disclose a computer and a means for transferring data thereto; and the apparatus comprises a slave module and a master module, the slave module being designed for wearing by a patient. See Column 6, lines 65-68; and Column 9, lines 18-27.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means of Ober to include the use of a computer, as per the teachings of Sunouchi et al, since it would provide an external processing means to process the data and control the feedback means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Szmaj whose telephone number is (571) 272-4733. The examiner can normally be reached on Monday-Friday, with second Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Brian Szmaj", is positioned above the printed name.

Brian Szmaj